**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION 2**
290 Broadway
New York, NY 10007-1866

VIA ELECTRONIC MAIL

July 14, 2020

Scott M. Krall
Manager, Remediation
PPG Industries, Inc.
440 College Park Drive
Monroeville, PA 15146

Re: Riverside Industrial Park Superfund Site, Newark, New Jersey: Administrative Settlement Agreement and Order on Consent For Remedial Investigation and Feasibility Study – CERCLA Docket No. 02-2014-2011

Dear Mr. Krall:

The U.S. Environmental Protection Agency (EPA) has reviewed and is writing in response to PPG Industries, Inc's (PPGs) letter from June 30, 2020 regarding Riverside Industrial Park Superfund Site Feasibility Study (FS).

Lead in the soil can be attributed to releases from past and current operations at the Site and is a site related contaminant. As stated in the Site Characterization Summary Report (Woodard & Curran, 2015), PPG Industries, Inc. (PPG) operated a paint manufacturing facility. Metal pigments were brought to the Site for the manufacturing of paints, including basic lead carbonate (also known as white lead). Elevated lead concentrations (at concentrations greater than the preliminary remedial goal of 800 mg/kg) are frequently observed in soils located on the south side of the Site, with a cluster of soil samples with elevated lead concentrations surrounding the perimeter of Building #7, including 6,210 mg/kg lead in RI boring B-30; 8,690 mg/kg lead in RI boring B-75; and 10,800 mg/kg lead in historical boring HF-2. Lead in the soil is a source material to groundwater, as evidenced with the substantial lead concentrations reported near Building #7.

Similar low-level lead concentrations are observed in the shallow groundwater unit (representing groundwater at depths of less than 12 feet bgs) at monitoring wells MW-114, MW-115, and MW-124, which were installed in native material, with lead concentrations less than 1 ug/L (which is the laboratory reporting limit). Overall, with the exception of MW-118 (which has been impacted by Building #10 operations, refer to FS Report Section 3.5.5), the shallow groundwater on the northern side of the Site has not been substantially impacted by lead contamination. Table 1 below reports the

maximum concentration per shallow monitoring well (non-detected lead concentrations are presented at the laboratory reporting limit of 1 ug/L) on the northern portion of the Site (excluding MW-118).

**Table 1: Maximum Concentration Per Shallow Well in Northern Portion of the Site**

| Monitoring Well Number on the North Side of the Site | Maximum Lead Concentration (ug/L) Reported for Three Sampling Events over 11-month Period |
|---|---|
| E-4 | 7.4 |
| E-5 | 1.4 |
| E-6 | 3.3 |
| E-7 | 2.0 |
| E-8 | 1.0 |
| MW-114 | 1.0 |
| MW-115 | 1.0 |
| MW-116 | 2.0 |
| MW-117 | 17.7 |
| MW-119 | 7.9 |
| MW-120 | 25.3 |
| MW-121 | 4.2 |
| MW-122 | 7.0 |
| MW-124 | 1.0 |

In contrast, on the southern portion of the Site, a cluster of elevated lead concentrations in groundwater (in particular MW-107, MW-108, and MW-110), was observed in the vicinity of Building #7 which are lead contaminated soils (Table 2). Lead-contaminated soils were not reported uniformly across the Site and portions of the Site may have been more impacted by past or current operations than other portions. However, based on the available soil and groundwater data, EPA is associating the lead contamination in the shallow groundwater to the site-related lead contaminated soils.

**Table 2: Maximum Concentration Per Shallow Well in Southern Portion of the Site**

| Monitoring Well Number on the South Side of the Site | Maximum Lead Concentration (ug/L) Reported for Three Sampling Events over 11-month Period |
|---|---|
| E-1 | 1.3 |
| E-2 | 3.7 |
| E-3 | 2.1 |
| MW-101 | 1.0 |
| MW-102 | 12.8 |
| MW-103 | 18.7 |
| MW-104 | 10.4 |
| MW-105 | 45.2 * |

| | |
|---|---|
| MW-106 | 26.5 (near Building #7) |
| MW-107 | 54.2 (near Building #7) |
| MW-108 | 109 (near Building #7) |
| MW-109 | 20.85 * (near Building #7) |
| MW-110 | 39.9 (near Building #7) |
| MW-111 | 14.6 (near Building #7) |
| MW-112 | 8.2 |
| MW-123 | 1.2 |
| * Average of field sample and duplicate | |

Regarding PPG's letter dated June 30, EPA responds as follows to the salient points discussed in Section A:

- EPA does not agree with the site-wide averages and upper confidence level calculations presented in the PPG letter because grouping data irrespective of the conceptual site model and site activities is not appropriate.
- EPA acknowledges the statements in the original Work Plan/QAPP. However, the conceptual site model for the Site has evolved.
- EPA agrees with PPG that there may be soil and groundwater contamination associated with historical fill material. However, the RI data have identified a site-related source of lead in the soils surrounding Building #7, and the shallow groundwater in the vicinity of this source material has been impacted.

EPA agrees with PPG that the groundwater in the deep unit (representing groundwater below the former riverbed at approximately 25 feet bgs) is likely not currently impacted by site-related lead contamination. Based on the five deep groundwater monitoring wells, the maximum lead concentration is 1.6 ug/L in the deep groundwater.

The groundwater remedial alternatives must be feasible options to address lead as a site-related contaminant, and they must be designed to be protective of human health and the environment and in compliance with applicable or relevant and appropriate requirements (ARARs). Groundwater Alternative 5 "Institutional Controls, River Edge Barrier Wall, and Focused In-Situ Remediation" was evaluated in FS Section 5.3.5, but was screened out as a viable option because, as stated by PPG in their text edits, lead contamination would only be address via institutional controls and a vertical barrier wall. Institutional controls cannot be used to comply with ARARs. Additionally, Groundwater Alternative #5 focuses exclusively on the volatile organic compounds (VOC), failing to achieve the RAO of restoring groundwater quality for semi-volatile organic compounds (SVOCs) and lead. For these reasons, Groundwater Alternative #5 was screened out of the Feasibility Study.

If you have any questions, feel free to contact me at 212-637-4302.

Sincerely,

Josh Smeraldi

Remedial Project Manager
Superfund and Emergency Managment Division

cc: Michael Sivak, EPA Region II
William Reilly, EPA Region II
Ken Bird, Woodard & Curran